

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	185	cam same (reciprocate or reciprocating) same ((shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	USOCR	OR	ON	2005/10/26 10:45
		(eccentric near2 cam) and shaft and reciprocating and (cutting and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/26 14:02
		30/90-102.ccls.	US-PGPUB; USPAT	OR	ON	2004/05/25 10:24
		(30/90-96.ccls.) and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:22
		(30/90-102.ccls.) and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:22
		(30/90-102).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/05/25 10:19
		30/90-102.ccls. and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:19
		30/90-102.ccls. and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2005/10/28 14:42
		83/178	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/24 17:37
S2	111	83/185	US-PGPUB; USPAT	OR	ON	2004/05/24 17:38
S3	49	83/185 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 17:40
S4	57	83/191 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 17:47
S5	55	83/582 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 17:49
S6	52	83/588 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 17:51
S7	19	83/627 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 17:51

S8	45	83/628 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 17:53
S9	70	83/914 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 17:54
S10	24	83/916 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 18:24
S11	65	83/917 and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/24 18:26
S12	1850	"83"/\$.ccls. and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 09:46
S13	361	83/54 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:01
S14	10	83/36 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:01
S15	12	83/471 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:02
S16	40	83/452 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:03
S17	93	82/46 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:07
S18	824	"82"/\$.ccls. and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:07
S19	241	"82"/\$.ccls. and ((tube or pipe) same (cutting or trimming or notching)) and sliding	US-PGPUB; USPAT	OR	ON	2004/05/25 10:16
S20	5	83/189 and ((tube or pipe) same (cutting or trimming or notching)) and sliding	US-PGPUB; USPAT	OR	ON	2004/05/25 10:17
S21	13	83/189 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:20
S22	2737791	"30"/(90-102).ccls. and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:19
S23	8	30/90 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:27
S24	0	83/471.2-477.1.ccls	US-PGPUB; USPAT	OR	ON	2004/05/25 10:23
S25	1720	83/471.2-477.1.ccls.	US-PGPUB; USPAT	OR	ON	2004/05/25 10:23
S26	45	30/91.2 and ((tube or pipe) same (cutting or trimming or notching))	US-PGPUB; USPAT	OR	ON	2004/05/25 10:27
S27	1	"6688207"	US-PGPUB; USPAT	OR	ON	2004/05/25 10:47

S28	1	"6695191"	US-PGPUB; USPAT	OR	ON	2004/05/25 10:47
S29	295	30/90.6	US-PGPUB; USPAT	OR	ON	2004/05/25 10:48
S30	489	385/75	US-PGPUB; USPAT	OR	ON	2004/05/25 10:49
S31	10	"5345952"	US-PGPUB; USPAT	OR	ON	2004/05/25 11:05
S32	345	"83"/\$.ccls. and (rotating near3 cam)	US-PGPUB; USPAT	OR	ON	2004/05/25 11:17
S33	6618	(rotating near3 cam) same shaft	US-PGPUB; USPAT	OR	ON	2004/05/25 11:17
S34	2511	(rotating near2 cam) near4 shaft	US-PGPUB; USPAT	OR	ON	2004/05/25 11:17
S35	1969	(rotating near2 cam) near2 shaft	US-PGPUB; USPAT	OR	ON	2004/05/25 11:17
S36	1160	(rotating near1 cam) near2 shaft	US-PGPUB; USPAT	OR	ON	2004/05/25 11:24
S37	187	(( rotating near1 cam) near2 shaft) and cutting	US-PGPUB; USPAT	OR	ON	2004/05/25 11:19
S38	973	(( rotating near1 cam) near2 shaft) not (( (rotating near1 cam) near2 shaft) and cutting)	US-PGPUB; USPAT	OR	ON	2004/05/25 11:35
S39	194	(( (rotating near1 cam) near2 shaft) not (( (rotating near1 cam) near2 shaft) and cutting)) and eccentric	US-PGPUB; USPAT	OR	ON	2004/05/25 11:35
S40	5	("2327646"   "4079647"   "4579029"   "4622793"   "4833958").PN.	USPAT	OR	ON	2004/05/25 11:41
S41	13	"4987811".URPN.	USPAT	OR	ON	2004/05/25 11:41
S42	1	"2812619".PN.	USPAT	OR	ON	2004/05/25 11:42
S43	7	"4230010".URPN.	USPAT	OR	ON	2004/05/25 11:42

S44	40	("0155347"   "0211619"   "0374464"   "0524691"   "0706279"   "1384696"   "1431641"   "1594155"   "1665805"   "1847273"   "2431567"   "2708970"   "2882971"   "3170349"   "3465634"   "3469481"   "3779113"   "4007653"   "4166403"   "4420314"   "4257292"   "4696211"   "4987811"   "5025691"   "5056392"   "5176057"   "5214991"   "5259225"   "5438897"   "5444908"   "5632188"   "5697278"   "5752424"   "5839341"   "5871788"   "5943934"   "6076447"   "6152005"   "6289709"   "6367362").PN.	USPAT	OR	ON	2004/05/25 11:43
S45	0	"6698324".URPN.	USPAT	OR	ON	2004/05/25 11:44
S46	0	"6698324".URPN.	USPAT	OR	ON	2004/05/25 11:44
S47	14	("0756902"   "0909285"   "1243656"   "1312067"   "1553378"   "2745492"   "3387525"   "3768359"   "3968713"   "3987695"   "4987811"   "5178049"   "5588344"   "5664473").PN.	USPAT	OR	ON	2004/05/25 11:44
S48	1	"6269721".URPN.	USPAT	OR	ON	2004/05/25 11:45
S49	1719	(tube or pipe) and holder and tool and rotating and cam	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/25 18:27
S50	17	(tube or pipe) same holder same tool same rotating same cam	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/25 18:02
S51	342	(tube or pipe) and holder and tool and rotating and cam and reciprocating	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/25 18:04
S52	1719	((tube or pipe) and holder and tool and rotating and cam) not-(((tube or pipe) same holder same tool same rotating same cam) and ((tube or pipe) and holder and tool and rotating and cam and reciprocating))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/25 18:22

S53	1702	((tube or pipe) and holder and tool and rotating and cam) not ((tube or pipe) same holder same tool same rotating same cam)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/25 18:23
S54	1377	((tube or pipe) and holder and tool and rotating and cam) not ((tube or pipe) and holder and tool and rotating and cam and reciprocating)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/25 18:24
S55	129	((tube or pipe) near4 cutting) and holder and tool and rotating and cam	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/26 07:44
S56	271	((tube or pipe) near4 cutting) and holder and rotating and cam	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/26 07:44
S57	142	((((tube or pipe) near4 cutting) and holder and rotating and cam) not (((tube or pipe) near4 cutting) and holder and tool and rotating and cam)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/26 07:45
S58	0	383/188	US-PGPUB; USPAT	OR	ON	2004/05/26 10:10
S59	172	83/188	US-PGPUB; USPAT	OR	ON	2004/05/26 10:20
S60	38	83/188	USOCR	OR	ON	2004/05/26 10:22
S61	29	83/189	US-PGPUB; USPAT	OR	ON	2004/05/26 10:24
S62	11	83/189	USOCR	OR	ON	2004/05/26 10:44
S63	148	83/191	US-PGPUB; USPAT	OR	ON	2004/05/26 11:08
S64	53	83/191	USOCR	OR	ON	2004/05/26 11:11
S65	72	83/178-195.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/05/26 11:12
S66	567	83/178-195.ccls.	US-PGPUB; USPAT	OR	ON	2004/05/26 11:12
S67	72	83/178-195.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/05/26 11:17
S68	325	"82"/\$.ccls. and (tube or pipe) and cutting and cam	US-PGPUB; USPAT	OR	ON	2004/05/26 11:33
S69	672	"82"/\$.ccls. and (tube or pipe) and cutting and cam	USOCR	OR	ON	2004/05/26 13:29
S70	10	"2670795"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:32

S71	14	"3120143"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:35
S72	14	"3234838"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:37
S73	4	"3455196"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:38
S74	10	"3762263"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:40
S75	6	"3921482"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:40
S76	14	"3924502"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:48
S77	15	"3971275"	US-PGPUB; USPAT	OR	ON	2004/05/26 13:49
S78	206	(eccentric near2 cam) and shaft and reciprocating and cutting and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/26 14:03
S79	206	(eccentric near2 cam) and shaft and reciprocating and (cutting and (tube or pipe))	US-PGPUB; USPAT	OR	ON	2004/05/26 14:39
S80	0	((eccentric near2 cam) and shaft and reciprocating and (cutting and (tube or pipe))) not ((eccentric near2 cam) and shaft and reciprocating and cutting and (tube or pipe))	US-PGPUB; USPAT	OR	ON	2004/05/26 14:03
S81	514	(eccentric near2 cam) and shaft and cutting and (tube or pipe)	US-PGPUB; USPAT	OR	ON	2004/05/26 14:04
S82	308	((eccentric near2 cam) and shaft and cutting and (tube or pipe)) not ((eccentric near2 cam) and shaft and reciprocating and (cutting and (tube or pipe)))	US-PGPUB; USPAT	OR	ON	2004/05/26 14:04
S83	232	(eccentric near2 cam) and shaft and reciprocating and (cutting and (tube or pipe))	USOCR	OR	ON	2004/05/26 14:05
S84	153	(eccentric near2 cam) and shaft and reciprocating and (cutting same (tube or pipe))	USOCR	OR	ON	2004/05/26 14:05
S85	12	"3120143".URPN.	USPAT	OR	ON	2004/05/26 14:32
S86	3	"3455196".URPN.	USPAT	OR	ON	2004/05/26 14:33
S87	5	("3495615"   "3606565"   "3617145"   "3620115"   "0114446").PN.	USPAT	OR	ON	2004/05/26 14:33
S88	8	"3762263".URPN.	USPAT	OR	ON	2004/05/26 14:34

S89	19	("0984577"   "1774567"   "2204516"   "2225272"   "2473654"   "3093023"   "3117375"   "3651569"   "3802793"   "3924502"   "4014063"   "4099310"   "4488467"   "4825543"   "5018275"   "5125690"   "5129158"   "5203083"   "5285576").PN.	USPAT	OR	ON	2004/05/26 14:34
S90	4	"5600862".URPN.	USPAT	OR	ON	2004/05/26 14:35
S91	8	"3292473".URPN.	USPAT	OR	ON	2004/05/26 14:36
S92	8	"3292473".URPN.	USPAT	OR	ON	2004/05/26 14:36
S93	14	("1946926"   "2079974"   "3292473"   "4329899"   "4462290"   "4919025"   "4939967"   "4987808"   "5074018"   "5097576"   "5133492"   "5143268"   "5313862"   "5826479").PN.	USPAT	OR	ON	2004/05/26 14:37
S94	0	"5931075".URPN.	USPAT	OR	ON	2004/05/26 14:38
S95	0	"5931075".URPN.	USPAT	OR	ON	2004/05/26 14:38
S96	15	("2753001"   "3641858"   "3867081"   "3918336"   "4165665"   "4462290"   "4515047"   "4621554"   "4635511"   "4712461"   "4919025"   "4956987"   "5040397"   "5063801"   "5301584").PN.	USPAT	OR	ON	2004/05/26 14:38
S97	2	"5826479".URPN.	USPAT	OR	ON	2004/05/26 14:38
S98	99	(rotating near2 cam) and shaft and reciprocating and (cutting same (tube or pipe))	US-PGPUB; USPAT	OR	ON	2004/05/26 14:45
S99	293	(rotating near2 cam) and shaft and reciprocating and (cutting same (tube or pipe))	USOCR	OR	ON	2004/05/26 14:46
S10 0	5	("0582689"   "2297177"   "3777606"   "4139134"   "4926729").PN.	USPAT	OR	ON	2004/09/20 16:05
S10 1	7	"5410929".URPN.	USPAT	OR	ON	2004/09/20 16:05
S10 2	9	("2323546"   "3005369"   "3180196"   "3455196"   "3971275"   "4043164"   "4194422"   "4459886"   "4913021").PN.	USPAT	OR	ON	2004/09/20 16:07
S10 3	3	"4986154".URPN.	USPAT	OR	ON	2004/09/20 16:08

S10 4	22	("1910627"   "3160493"   "3316790"   "3620104"   "3824887"   "3962939"   "4059893"   "4452105"   "4530452"   "4731928"   "5010797"   "5361489"   "5412856"   "5481638"   "5511305"   "5771573"   "6115527"   "6161289"   "6311581"   "6487939"   "6508148"   "6577804").PN.	USPAT	OR	ON	2004/09/20 16:09
S10 5	0	"6688207".URPN.	USPAT	OR	ON	2004/09/20 16:10
S10 6	0	"6688207".URPN.	USPAT	OR	ON	2004/09/20 16:11
S10 7	26	("2521854"   "3903598"   "4203539"   "4216004"   "4619387"   "4621754"   "4644647"   "4852244"   "4976390"   "5031321"   "5063672"   "5088637"   "5123581"   "5125549"   "5301868"   "5345952"   "5351333"   "5360464"   "5395025"   "5501385"   "5563974"   "5838850"   "5946986"   "5949938"   "6023996"   "6189757").PN.	USPAT	OR	ON	2004/09/20 16:11
S10 8	0	"6695191".URPN.	USPAT	OR	ON	2004/09/20 16:12
S10 9	0	"6695191".URPN.	USPAT	OR	ON	2004/09/20 16:12
S11 0	829	83/54	US-PGPUB; USPAT	OR	ON	2004/09/20 16:15
S11 1	464	83/54.ccls.	US-PGPUB; USPAT	OR	ON	2004/09/20 16:24
S11 2	20	83/189.ccls.	US-PGPUB; USPAT	OR	ON	2004/09/20 16:25
S11 3	440	83/917.ccls.	US-PGPUB; USPAT	OR	ON	2004/09/20 17:15
S11 4	115	"83"/\$.ccls. and (tub or pipe) and cutt\$4 and cam and reciproc\$4	US-PGPUB; USPAT	OR	ON	2004/09/20 17:20
S11 5	17	(tub or pipe) same cutt\$4 same cam same reciproc\$4	US-PGPUB; USPAT	OR	ON	2004/09/20 17:20
S11 6	280	(tub or pipe) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/20 17:28
S11 7	404	(tub or pipe) same cutt\$4 same reciproc\$4	US-PGPUB; USPAT	OR	ON	2004/09/20 17:42



S11 8	10	"2670795"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:45
S11 9	14	"3120143"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:47
S12 0	14	"3234838"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:48
S12 1	4	"3455196"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:49
S12 2	10	"3762263"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:50
S12 3	6	"3921482"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:51
S12 4	14	"3924502"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:53
S12 5	15	"3971275"	US-PGPUB; USPAT	OR	ON	2004/09/20 17:53
S12 6	2	"2704124"	US-PGPUB; USPAT	OR	ON	2004/09/21 08:49
S12 7	905	83/628	US-PGPUB; USPAT	OR	ON	2004/09/21 08:49
S12 8	756	83/628.ccls.	US-PGPUB; USPAT	OR	ON	2004/09/21 09:11
S12 9	986	(pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:12
S13 0	96	"82"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:20
S13 1	464	"82"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	USOCR	OR	ON	2004/09/21 09:24
S13 2	136	"83"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:28
S13 3	66	"30"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:29
S13 4	64	"29"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:31
S13 5	13	"81"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:31
S13 6	4	"411"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:32
S13 7	14	"74"/\$.ccls. and (pipe or tube) same cutt\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:33
S13 8	27	"74"/\$.ccls. and (pipe or tube) same notch\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:35
S13 9	15	"81"/\$.ccls. and (pipe or tube) same notch\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:39
S14 0	8	"82"/\$.ccls. and (pipe or tube) same notch\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:39

S14 1	44	"83"/\$.ccls. and (pipe or tube) same notch\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:44
S14 2	24	"29"/\$.ccls. and (pipe or tube) same notch\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:19
S14 3	735	(pipe or tube) same notch\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 09:49
S14 4	734	( (pipe or tube) same notch\$4 same cam) not (13-17)	US-PGPUB; USPAT	OR	ON	2004/09/21 09:50
S14 5	9	("2526336"   "2670795"   "2829983"   "3259003"   "3266356"   "4082022"   "4440052"   "4470330"   "5896796").PN.	USPAT	OR	ON	2004/09/21 10:24
S14 6	2	"6128991".URPN.	USPAT	OR	ON	2004/09/21 10:24
S14 7	26	("2192531"   "2579675"   "2765848"   "2776003"   "2964984"   "3099182"   "3120143"   "3143018"   "3153360"   "3180196"   "3234838"   "3405583"   "3410168"   "3446105"   "3653301"   "3938413"   "3971275"   "4180893"   "4194422"   "4337680"   "4459886"   "4476082"   "4562760"   "4877174"   "4930384"   "4986154").PN.	USPAT	OR	ON	2004/09/21 10:25
S14 8	1	"5964137".URPN.	USPAT	OR	ON	2004/09/21 10:28
S14 9	22	("2515260"   "2841314"   "2984129"   "3032867"   "3532113"   "3687166"   "3766979"   "3833020"   "3863667"   "3983897"   "4177827"   "4215749"   "4411459"   "4415000"   "4434809"   "4516593"   "4540011"   "4552170"   "4730636"   "4809735"   "5152310"   "5316037").PN.	USPAT	OR	ON	2004/09/21 10:29
S15 0	6	"5620020".URPN.	USPAT	OR	ON	2004/09/21 10:31
S15 1	5	("0582689"   "2297177"   "3777606"   "4139134"   "4926729").PN.	USPAT	OR	ON	2004/09/21 10:31
S15 2	7	"5410929".URPN.	USPAT	OR	ON	2004/09/21 10:32
S15 3	7	"5410929".URPN.	USPAT	OR	ON	2004/09/21 10:33

S15 4	5	("3495615"   "3606565"   "3617145"   "3620115"   "0114446").PN.	USPAT	OR	ON	2004/09/21 10:33
S15 5	8	"3762263".URPN.	USPAT	OR	ON	2004/09/21 10:33
S15 6	2	("2028578"   "2840902").PN.	USPAT	OR	ON	2004/09/21 10:36
S15 7	2	"3810402".URPN.	USPAT	OR	ON	2004/09/21 10:36
S15 8	22	("1910627"   "3160493"   "3316790"   "3620104"   "3824887"   "3962939"   "4059893"   "4452105"   "4530452"   "4731928"   "5010797"   "5361489"   "5412856"   "5481638"   "5511305"   "5771573"   "6115527"   "6161289"   "6311581"   "6487939"   "6508148"   "6577804").PN.	USPAT	OR	ON	2004/09/21 10:37
S15 9	0	"6688207".URPN.	USPAT	OR	ON	2004/09/21 10:38
S16 0	0	"6688207".URPN.	USPAT	OR	ON	2004/09/21 10:38
S16 1	3	("0387408"   "2704124"   "3153360").PN.	USPAT	OR	ON	2004/09/21 10:42
S16 2	5	"4459886".URPN.	USPAT	OR	ON	2004/09/21 10:42
S16 3	5	("2507556"   "2780117"   "3122033"   "4462291"   "4485708").PN.	USPAT	OR	ON	2004/09/21 10:43
S16 4	2	"4763551".URPN.	USPAT	OR	ON	2004/09/21 10:43
S16 5	5	("3869938"   "4708029"   "5040294"   "5187866"   "5218883").PN.	USPAT	OR	ON	2004/09/21 10:44
S16 6	1	"5868042".URPN.	USPAT	OR	ON	2004/09/21 10:44
S16 7	9	("2304771"   "3129624"   "3273433"   "3905264"   "4108029"   "4109555"   "4694718"   "4766792"   "4872384").PN.	USPAT	OR	ON	2004/09/21 10:45
S16 8	3	"4964328".URPN.	USPAT	OR	ON	2004/09/21 10:45
S16 9	6	("4763503"   "4875270"   "4926667"   "5040294"   "5085099"   "5115663").PN.	USPAT	OR	ON	2004/09/21 10:45

S17 0	1	"5187866".URPN.	USPAT	OR	ON	2004/09/21 10:46
S17 1	10	("2852957"   "3447395"   "3845667"   "3869938"   "4113006"   "4211192"   "4269438"   "4293995"   "4382390"   "4597365").PN.	USPAT	OR	ON	2004/09/21 10:46
S17 2	19	"4708029".URPN.	USPAT	OR	ON	2004/09/21 10:46
S17 3	27	"74"/\$.ccls. and (pipe or tube) same notch\$4 same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:21
S17 4	137	74/10.6.ccls.	US-PGPUB; USPAT	OR	ON	2004/09/21 11:29
S17 5	83	83/178.ccls.	US-PGPUB; USPAT	OR	ON	2004/09/21 11:31
S17 6	57	83/185.ccls.	US-PGPUB; USPAT	OR	ON	2004/09/21 11:32
S17 7	12	83/191.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:36
S17 8	30	83/582.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:42
S17 9	50	83/588.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:43
S18 0	27	83/627.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:44
S18 1	119	83/628.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:48
S18 2	38	83/914.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:49
S18 3	19	83/916.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:49
S18 4	55	83/917.ccls. and cam	US-PGPUB; USPAT	OR	ON	2004/09/21 11:49
S18 5	3	("1432073"   "1764129"   "3084580").PN.	USPAT	OR	ON	2004/09/21 11:51
S18 6	3	"4750393".URPN.	USPAT	OR	ON	2004/09/21 11:52
S18 7	20	("2783838"   "2919794"   "3527422"   "3760674"   "3854356"   "3999715"   "4002307"   "4007884"   "4014476"   "4023741"   "4033519"   "4052017"   "4099679"   "4108388"   "4157048"   "4491282"   "4496109"   "4716801"   "4789277"   "4872381").PN.	USPAT	OR	ON	2004/09/21 11:53

S18 8	2	"5033345".URPN.	USPAT	OR	ON	2004/09/21 11:53
S18 9	2	"5033345".URPN.	USPAT	OR	ON	2004/09/21 11:59
S19 0	12	("0018025"   "0723358"   "1318177"   "1848642"   "2672682"   "4036092"   "4130034"   "4468995"   "4483223"   "4750393"   "4813314"   "4881399").PN.	USPAT	OR	ON	2004/09/21 12:00
S19 1	7	"5609081".URPN.	USPAT	OR	ON	2004/09/21 12:01
S19 2	7	"5609081".URPN.	USPAT	OR	ON	2004/09/21 12:03
S19 3	2148	punch same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 16:21
S19 4	695	punch same cam same shaft	US-PGPUB; USPAT	OR	ON	2004/09/21 16:21
S19 5	141	"83"/\$.ccls. and punch same cam same shaft	US-PGPUB; USPAT	OR	ON	2004/09/21 16:34
S19 6	0	"82"/\$.ccls. and punch same cam same shaft	US-PGPUB; USPAT	OR	ON	2004/09/21 16:34
S19 7	1	"81"/\$.ccls. and punch same cam same shaft	US-PGPUB; USPAT	OR	ON	2004/09/21 16:34
S19 8	110	"29"/\$.ccls. and punch same cam same shaft	US-PGPUB; USPAT	OR	ON	2004/09/21 16:40
S19 9	32	"74"/\$.ccls. and punch same cam same shaft	US-PGPUB; USPAT	OR	ON	2004/09/21 16:42
S20 0	107	"72"/\$.ccls. and punch same cam same shaft	US-PGPUB; USPAT	OR	ON	2004/09/21 16:46
S20 1	49	"72"/\$.ccls. and punch same cam same piston	US-PGPUB; USPAT	OR	ON	2004/09/21 17:04
S20 2	4	("2725916"   "4306443"   "4550588"   "4691553").PN.	USPAT	OR	ON	2004/09/21 17:04
S20 3	0	"5022255".URPN.	USPAT	OR	ON	2004/09/21 17:04
S20 4	429	"83"/\$.ccls. and punch same cam	US-PGPUB; USPAT	OR	ON	2004/09/21 17:05
S20 5	288	("83"/\$.ccls. and punch same cam ) not ("83"/\$.ccls. and punch same cam same shaft)	US-PGPUB; USPAT	OR	ON	2004/09/21 17:05
S20 6	12	("0018025"   "0723358"   "1318177"   "1848642"   "2672682"   "4036092"   "4130034"   "4468995"   "4483223"   "4750393"   "4813314"   "4881399").PN.	USPAT	OR	ON	2004/09/21 18:11

S20 7	7	"5609081".URPN.	USPAT	OR	ON	2004/09/21 18:12
S20 8	4	("2725916"   "4306443"   "4550588"   "4691553").PN.	USPAT	OR	ON	2004/09/21 18:17
S20 9	0	"5022255".URPN.	USPAT	OR	ON	2004/09/21 18:18
S21 0	0	"5022255".URPN.	USPAT	OR	ON	2004/09/21 18:18
S21 1	2	("4819021"   "4988030").PN.	USPAT	OR	ON	2004/09/21 18:18
S21 2	6	"5628502".URPN.	USPAT	OR	ON	2004/09/21 18:19
S21 3	84	83/178.ccls.	US-PGPUB; USPAT	OR	ON	2005/03/08 14:53
S21 4	573	83/178-195.ccls.	US-PGPUB; USPAT	OR	ON	2005/03/08 14:53
S21 5	73	83/178-195.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 14:56
S21 6	30	83/582.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 14:57
S21 7	51	83/588.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 14:59
S21 8	27	83/627.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:17
S21 9	121	83/628.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:18
S22 0	39	83/914.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:19
S22 1	19	83/916.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:19
S22 2	55	83/917.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:21
S22 3	109	83/54.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:22
S22 4	9	83/36.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:22
S22 5	3	83/471.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:22
S22 6	24	83/452.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:23
S22 7	15	82/46.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:23
S22 8	5	83/149.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:23
S22 9	6	83/189.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:24

S23 0	9	30/91.2.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:25
S23 1	11	74/106.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:25
S23 2	2	83/437.6.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:25
S23 3	57	83/602.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/03/08 15:25
S23 4	86	83/178.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 10:53
S23 5	57	83/185.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 10:54
S23 6	86	83/191.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 10:56
S23 7	337	83/582.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 10:59
S23 8	656	83/588.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 11:05
S23 9	175	83/627.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 11:05
S24 0	925	83/627-628.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 11:09
S24 1	272	83/914.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 11:11
S24 2	578	83/916-917.ccls.	US-PGPUB; USPAT	OR	ON	2005/09/27 11:11
S24 3	2092	cam same cut\$5 same (pipe or tube)	US-PGPUB; USPAT	OR	ON	2005/10/25 17:42
S24 4	262	cam near6 cut\$5 near6 (pipe or tube)	US-PGPUB; USPAT	OR	ON	2005/10/25 17:28
S24 5	10	"2670795"	US-PGPUB; USPAT	OR	ON	2005/10/25 17:30
S24 6	14	"3120143"	US-PGPUB; USPAT	OR	ON	2005/10/25 17:32
S24 7	14	"3234838"	US-PGPUB; USPAT	OR	ON	2005/10/25 17:33
S24 8	4	"3455196"	US-PGPUB; USPAT	OR	ON	2005/10/25 17:34
S24 9	10	"3762263"	US-PGPUB; USPAT	OR	ON	2005/10/25 17:35
S25 0	7	"3921482"	US-PGPUB; USPAT	OR	ON	2005/10/25 17:35
S25 1	14	"3924502"	US-PGPUB; USPAT	OR	ON	2005/10/25 17:37
S25 2	582	dual near1 cam	US-PGPUB; USPAT	OR	ON	2005/10/25 17:37

S25 3	20	(dual near1 cam) same tool	US-PGPUB; USPAT	OR	ON	2005/10/25 17:40
S25 4	499	"82"/\$.ccls. and cam same cut same (pipe or tube)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/25 17:41
S25 5	179	cam same cut\$5 same (pipe or tube) same reciproc\$6	US-PGPUB; USPAT	OR	ON	2005/10/25 17:53
S25 6	3	("3129624"   "3848452").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/25 17:51
S25 7	11	("4036091").URPN.	USPAT	OR	ON	2005/10/25 17:51
S25 8	38	cam same notch\$5 same (pipe or tube) same reciproc\$6	US-PGPUB; USPAT	OR	ON	2005/10/25 18:02
S25 9	131	rice.inv. and cam	US-PGPUB; USPAT	OR	ON	2005/10/25 18:03
S26 0	56	rice.inv. and cam and (pipe or tube)	US-PGPUB; USPAT	OR	ON	2005/10/25 18:03
S26 1	9	"3073195"	US-PGPUB; USPAT	OR	ON	2005/10/26 09:44
S26 2	6	("3073195").URPN.	USPAT	OR	ON	2005/10/26 09:53
S26 3	6	"4459886"	USPAT	OR	ON	2005/10/26 09:53
S26 4	8	"4459886"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/26 09:53
S26 5	5	("3383888"   "3786662"   "4989482"   "5398533").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 10:10
S26 6	6	("5941112").URPN.	USPAT	OR	ON	2005/10/26 10:13
S26 7	14	("2526336"   "2670795"   "2829983"   "3259003"   "3266356"   "4082022"   "4440052"   "4470330"   "5896796").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 10:15
S26 8	2	("6128991").URPN.	USPAT	OR	ON	2005/10/26 10:19
S26 9	1485	cam same reciproc\$5 same (shear or notch or cut)	USPAT	OR	ON	2005/10/26 10:20
S27 0	2411	cam same reciproc\$5 same (shear\$5 or notch\$5 or cut\$5)	USPAT	OR	ON	2005/10/26 10:26



S27 1	332	"83"/\$.ccls. and cam same reciprocate\$5 same (shear\$5 or notch\$5 or cut\$5)	USPAT	OR	ON	2005/10/26 10:20
S27 2	346	"83"/\$.ccls. and cam same reciprocate\$5 same (shear\$5 or notch\$5 or cut\$5)	US-PGPUB; USPAT	OR	ON	2005/10/26 10:21
S27 3	268	cam same reciprocate\$5 same (shear\$5 or notch\$5 or cut\$5) same (pipe or tube or hollow)	US-PGPUB; USPAT	OR	ON	2005/10/26 10:44
S27 4	4745	cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	USOCR	OR	ON	2005/10/26 10:45
S27 5	403	"83"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	USOCR	OR	ON	2005/10/26 10:58
S27 6	129	"82"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:01
S27 7	84	"30"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:03
S27 8	244	"74"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:21
S27 9	350	"29"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:32
S28 0	22	"81"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:35
S28 1	178	"72"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:39

S28 2	17	"76"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:49
S28 3	6130	cam near5 notch\$5	US-PGPUB; USPAT	OR	ON	2005/10/26 11:42
S28 4	14	cam near5 notch\$5 near5 reciprocate\$5	US-PGPUB; USPAT	OR	ON	2005/10/26 11:44
S28 5	64	cam near5 notch\$5 near5 tube	US-PGPUB; USPAT	OR	ON	2005/10/26 11:44
S28 6	68	cam near5 notch\$5 near5 (tube or pipe)	US-PGPUB; USPAT	OR	ON	2005/10/26 11:44
S28 7	11	"225"/\$.ccls. and cam same (reciprocate or reciprocating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:51
S28 8	16978	cam same (rotate or rotating) same (shear or shearing or notch or notching or cut or cutting) same (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:52
S28 9	31	cam near6 (rotate or rotating) near6 (shear or shearing or notch or notching or cut or cutting) near6 (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 11:52
S29 0	64	cam near6 (rotate or rotating) near10 (shear or shearing or notch or 10otching or cut or cutting) near10 (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 12:56
S29 1	1152	cam near10 (shear or shearing or notch or notching or cut or cutting) near10 (pipe or tube or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:02
S29 2	0	"83""."178".ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:03
S29 3	60	83/178.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:09
S29 4	44	83/185.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:16
S29 5	63	83/191.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:20
S29 6	81	83/582.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:23

S29 7	116	83/588.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:27
S29 8	41	83/627.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:29
S29 9	123	83/628.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:33
S30 0	116	83/914.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:37
S30 1	36	83/916.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:37
S30 2	154	83/916-917.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 14:43
S30 3	404	83/54.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:04
S30 4	32	83/36.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:01
S30 5	95	83/56.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:03
S30 6	32	83/36.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:03
S30 7	38	83/471.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:06
S30 8	67	83/452.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:17
S30 9	12	("1035277"   "2812816"   "2815811"   "2870837"   "3203289"   "3616719").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:07
S31 0	3	("3777605").URPN.	USPAT	OR	ON	2005/10/26 15:08
S31 1	19	83/189.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:18
S31 2	419	83/178-195.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:33

S31 3	2	("2323546").URPN.	USPAT	OR	ON	2005/10/26 15:30
S31 4	75	82/46.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 15:35
S31 5	61	74/10.6.ccls. and (tube or pipe or hollow)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 17:48
S31 6	151	"30"/\$.ccls. and saw same cam same reciprocating\$4	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 17:52
S31 7	151	"30"/\$.ccls. and (saw same cam same reciprocating\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/26 17:54
S31 8	4592	cam same two same reciprocating\$4	US-PGPUB; USPAT	OR	ON	2005/10/27 08:47
S31 9	211	cam near\$4 two near\$4 reciprocating\$4	US-PGPUB; USPAT	OR	ON	2005/10/27 08:47
S32 0	445	cam same two same reciprocating\$4 same cut\$5	US-PGPUB; USPAT	OR	ON	2005/10/27 08:48
S32 1	3	09/892096	US-PGPUB; USPAT	OR	ON	2005/10/27 10:43
S32 2	66	("2190156"   "2673630"   "2722137"   "2793661"   "3206989"   "3236111"   "3289798"   "3360021"   "3388728"   "3461732"   "3496972"   "3627389"   "3945120"   "3971132"   "4137632"   "4235017"   "4238884"   "4240204"   "4255858"   "4318224"   "4379362"   "4385443"   "4449062"   "4550501"   "4628605"   "4893994"   "4962588"   "4991818"   "5007172"   "5009012"   "5025562"   "5050307"   "5079844"   "5083376"   "5212887"   "5322302"   "5392519"   "5421091"   "5450925"   "5479711"   "5555626"   "5566458"   "5598636"   "5607023"   "5687483"   "5725058"   "5819420"   "5839347"   "5855070"   "5987758"   "6068405"   "6113832"   "6263979"   "6272757"   "RE35878").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/27 10:44

S32 3	8730	tube near3 cutting	US-PGPUB; USPAT	OR	ON	2005/10/27 15:01
S32 4	568	"83"/\$.ccls. and tube near3 cutting	US-PGPUB; USPAT	OR	ON	2005/10/27 15:48
S32 5	14	("2619174"   "3385148"   "3756100"   "4213357"   "4359820"   "4412401"   "4944205"   "5199221"   "5667185"   "5956853"   "6009780"   "6102384").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/27 15:03
S32 6	71	"83"/\$.ccls. and (tube near3 cutting) same die	US-PGPUB; USPAT	OR	ON	2005/10/27 15:07
S32 7	289	(tube near3 cutting) same die	US-PGPUB; USPAT	OR	ON	2005/10/27 15:13
S32 8	218	S327 not S326	US-PGPUB; USPAT	OR	ON	2005/10/27 15:07
S32 9	144	(pipe near3 cutting) same die	US-PGPUB; USPAT	OR	ON	2005/10/27 15:23
S33 0	4	"4986154"	US-PGPUB; USPAT	OR	ON	2005/10/27 15:23
S33 1	13	("2323546"   "3005369"   "3180196"   "3455196"   "3971275"   "4043164"   "4194422"   "4459886"   "4913021").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/27 15:24
S33 2	0	( pipe or tube) same cuttign same track	US-PGPUB; USPAT	OR	ON	2005/10/28 11:33
S33 3	563	( pipe or tube) same cutting same track	US-PGPUB; USPAT	OR	ON	2005/10/28 11:34
S33 4	10198	( pipe or tube) same rotat\$5 same cam	US-PGPUB; USPAT	OR	ON	2005/10/28 11:35
S33 5	1267	( pipe or tube) near5 rotat\$5 near5 cam	US-PGPUB; USPAT	OR	ON	2005/10/28 11:35
S33 6	989	( pipe or tube) near4 rotat\$5 near4 cam	US-PGPUB; USPAT	OR	ON	2005/10/28 11:35
S33 7	1092	( pipe or tube) same rotat\$5 same cam same (shear\$5 or cut\$5)	US-PGPUB; USPAT	OR	ON	2005/10/28 11:40
S33 8	272	( pipe or tube) same rotat\$5 same cam same (shear\$5 or cut\$5) same two	US-PGPUB; USPAT	OR	ON	2005/10/28 11:41
S33 9	357	( pipe or tube) same rotat\$5 same cam same (shear\$5 or cut\$5) same (two or plurality)	US-PGPUB; USPAT	OR	ON	2005/10/28 11:41
S34 0	129	72/452.6-452.7.ccls.	US-PGPUB; USPAT	OR	ON	2005/10/28 14:51
S34 1	342	29/34r.ccls.	US-PGPUB; USPAT	OR	ON	2005/10/28 14:58

S34 2	0	29/537.ccls.	US-PGPUB; USPAT	OR	ON	2005/10/28 14:58
S34 3	631	29/557.ccls.	US-PGPUB; USPAT	OR	ON	2005/10/28 14:58
S34 4	26	29/557.ccls. and cam	US-PGPUB; USPAT	OR	ON	2005/10/28 15:00
S34 5	631	29/557.ccls.	US-PGPUB; USPAT	OR	ON	2005/10/28 15:00
S34 6	4	("3696657"   "4934167"   "5127256"   "5335532").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/28 15:08
S34 7	0	("5546785").URPN.	USPAT	OR	ON	2005/10/28 15:10
S34 8	6	"5647243"	USPAT	OR	ON	2005/10/28 15:10
S34 9	9	"5647243"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/28 15:18
S35 0	48	"3735629"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/28 15:18